

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,271	10/10/2001	Edward L. Witzke	SD-6778/96430	8861
20567 7	590 06/29/2005		EXAMINER	
SANDIA CORPORATION P O BOX 5800			MARCELO, MELVIN C	
MS-0161	•		ART UNIT	PAPER NUMBER
ALBUQUERQ	UE, NM 87185-0161		2662	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		Application No.	Applicant(s)				
		09/975,271	WITZKE ET AL.	,			
		Examiner	Art Unit				
		Melvin Marcelo	2662				
Period f	The MAILING DATE of this communication or Reply	appears on the cover	sheet with the correspondence	address			
THE - Extended - If th - If No - Fail Any	HORTENED STATUTORY PERIOD FOR RE MAILING DATE OF THIS COMMUNICATIC ensions of time may be available under the provisions of 37 °CFI or SIX (6) MONTHS from the mailing date of this communication e period for reply specified above is less than thirty (30) days, a poperiod for reply is specified above, the maximum statutory per ure to reply within the set or extended period for reply will, by state of the property of the period for reply will, by state of the period for reply will. See 37 °CFR 1.704(b).	N. R 1.136(a). In no event, howe reply within the statutory min riod will apply and will expire S atute. cause the application to	ver, may a reply be timely filed imum of thirty (30) days will be considered tim SIX (6) MONTHS from the mailing date of this	nely. : communication.			
Status							
1)[🛛	Responsive to communication(s) filed on 1	0 October 2001					
2a)□	——————————————————————————————————————						
3)				he merits is			
,	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	tion of Claims						
4)⊠ 5)⊠ 6)⊠ 7)⊠ 8)□	Claim(s) <u>1-26</u> is/are pending in the applicate 4a) Of the above claim(s) is/are with Claim(s) <u>13-15,25,26 and 28</u> is/are allowed Claim(s) <u>1,4-6,8,9,16,19,20 and 27</u> is/are re Claim(s) <u>2,3,7,10-12,17,18 and 21-24</u> is/are Claim(s) are subject to restriction and	drawn from considera ejected. e objected to.					
Applicat	ion Papers						
10)⊠	The specification is objected to by the Example The drawing(s) filed on 10 October 2001 is a Applicant may not request that any objection to Replacement drawing sheet(s) including the contraction of the oath or declaration is objected to by the	are: a)⊠ accepted of the drawing(s) be held i rection is required if the	in abeyance. See 37 CFR 1.85(a). cdrawing(s) is objected to. See 37 (	CFR 1.121(d).			
Priority	under 35 U.S.C. § 119	•					
12)□ a)	Acknowledgment is made of a claim for fore  All b) Some * c) None of:  1. Certified copies of the priority docum  2. Certified copies of the priority docum  3. Copies of the certified copies of the papplication from the International Bur  See the attached detailed Office action for a	ents have been recei ents have been recei priority documents ha reau (PCT Rule 17.2)	ved. ved in Application No ve been received in this Nationa a)).	al Stage			
Attachmen	nt(s)						
	ce of References Cited (PTO-892)	4) 🔲 !	nterview Summary (PTO-413)				
3) 🔲 Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/ er No(s)/Mail Date	/08) 5) 🔲 I	Paper No(s)/Mail Date Notice of Informal Patent Application (P <sup>*</sup> Other:	TO-152)			

Application/Control Number: 09/975,271

Art Unit: 2662

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8, 9 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 8, lines 2 and 4, "said switch transceiver" lacks a proper antecedent basis in claims 8, 7 and 1. It is not clear whether the switch itself has a transceiver or the circuit board transceiver in claim 1 has been associated with the switch. Claim 9 depends on 8.

Claim 27 depends on claim 24. It is not clear whether applicant intended this claim to depend on independent claim 26 rather than 24, since claim 27 repeats some of the limitations of 24/22.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1, 4-6, 16, 19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Auckland et al. (US 2002/0183013 A1).

Auckland teaches the circuit board with electronic components and a transceiver (Figure 10 and paragraphs 0099-0100). Since the circuit board has a transceiver, a plurality of circuit

Application/Control Number: 09/975,271

Art Unit: 2662

boards can communicate between themselves when they are in RF range of each other (i.e. they can form an ad hoc network with a local area). With respect to the claims below, references to the prior art appear in parenthesis.

Page 3

- 1. A localized wireless communication system for communication between a plurality of circuit boards (In Auckland, a plurality of circuit boards can communicate between themselves since each circuit board has a transceiver), each of the circuit boards (Figure 10) having at least one electronic component located on the board (Components 1004), said system comprising a transceiver on each of the circuit boards (RF front end 1006), said transceiver enabling radio frequency communication between the circuit boards.
- 4. The system of claim 1 further comprising a modulator for modulating electrical signals from the circuit board into signals for radio frequency transmission by said transceiver (RF front end includes modulation, paragraph 0091).
- 5. The system of claim 4 wherein said modulator comprises a spread spectrum modulator (RF protocols include CDMA, paragraph 0006).
- 6. The system of claim 1 further comprising a demodulator for demodulating radio frequency signals received by said transceiver into electrical signals for the circuit board (RF front end includes demodulation, paragraph 0091).
- 16. A method of communicating between a plurality of circuit boards, each of the circuit boards (Figure 10) having at least one electronic component (Components 1004)

located on the board, the method comprising transmitting and receiving radio frequency signals

to and from transceivers (RF front end 1006) located on each of the circuit boards.

- 19. The method of claim 16 further comprising the step of modulating electrical signals from the circuit boards into signals for radio frequency transmission by the transceivers (RF front end includes modulation, paragraph 0091).
- 20. The method of claim 16 further comprising the step of demodulating radio frequency signals received by the transceivers into electrical signals for the circuit boards (RF front end includes demodulation, paragraph 0091).

## Allowable Subject Matter

- 5. Claims 13-15, 25, 26 and 28 are allowed.
- 6. Claims 2, 3, 7, 10-12, 17, 18 and 21-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. Claims 8, 9 and 27 (if still depending on 24/22/21/16) would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin Marcelo whose telephone number is 571-272-3125. The examiner can normally be reached on Mon-Fri 8:30-5:00.

Art Unit: 2662

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Melvin Marcelo Primary Examiner Art Unit 2662

June 27, 2005